



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,801	07/27/2001	Zine-Eddine Boutaghou	S01.12-0726/STL 9815	2160

7590 01/12/2005

Westman Champlin & Kelly
900 Second Avenue South
Suite 1600 - International Centre
Minneapolis, MN 55402-3309

EXAMINER

RENNER, CRAIG A

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,801

Applicant(s)

BOUTAGHOU ET AL.

Examiner

Craig A. Renner

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-14 and 16-46 is/are pending in the application.
- 4a) Of the above claim(s) 5-8 and 16-44 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12,13 and 45 is/are allowed.
- 6) ☒ Claim(s) 1,11,14 and 46 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 5-8 and 16-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to one or more non-elected inventions/species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 28 May 2003.

Drawings

2. The drawings were received on 09 August 2004. These drawings are accepted.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 46 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Norio (JP58-088872).

Art Unit: 2652

Norio teaches a slider (FIGS. 2(a) and 2(b), for instance) comprising a slider body having a bearing surface (includes 1a), a cavity dam (2a) and a sub-ambient pressure cavity (includes 3a), the sub-ambient pressure cavity having a cavity floor (as shown in FIG. 2(b), for instance), a plurality of sides and a depth that progressively varies between a point on one of the sides and a corresponding point on an opposing side (as shown in FIG. 2(b), for instance), wherein the cavity floor comprises at least four substantially flat bottom surfaces (includes each 3a and between each adjacent 3a) separated by an elevational change between adjacent pairs of bottom surfaces (as shown in FIG. 2(b), for instance) [as per claim 46]; wherein the sub-ambient pressure cavity further comprises a transversal axis; and two of said at least four bottom surfaces are positioned substantially on a first side of the transversal axis and two other of said at least four bottom surfaces are positioned substantially on a second side of the transversal axis (as shown in FIG. 2(b), for instance) [as per claim 11].

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Cha (US 6,765,758).

Cha teaches a slider (FIG. 4, for instance) comprising a slider body (10) having a bearing surface (includes 24 and 26, for instance), a cavity dam (15) and a sub-ambient pressure cavity (includes 19, 21 and 23, for instance), the sub-ambient pressure cavity having a cavity floor (as shown in FIG. 4, for instance), wherein the cavity floor comprises a plurality of substantially flat bottom surfaces separated by at least one elevational change (as shown in FIG. 4, for instance); first and second rails (12 and 14)

Art Unit: 2652

disposed on opposite sides of the sub-ambient pressure cavity (as shown in FIG. 4, for instance), each rail forming a portion of the bearing surface (as shown in FIG. 4, for instance); and wherein the sub-ambient pressure cavity further comprises a longitudinal axis (40), and the plurality of bottom surfaces comprises a first bottom surface (21) positioned substantially on one side of the longitudinal axis (as shown in FIG. 4, for instance); and a second bottom surface (19) positioned substantially on the other side of the longitudinal axis (in as broad as the term "substantially" may be construed), the depth of the first bottom surface being different than the depth of the second bottom surface (as shown in FIG. 4, for instance).

6. Claims 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Ryan (US 6,606,222).

Ryan teaches a slider (FIG. 2, for instance) comprising a slider body (110) having a bearing surface (includes 150, for instance), a cavity dam (170) and a sub-ambient pressure cavity (includes 176, 160 and 162, for instance), the sub-ambient pressure cavity having a cavity floor that comprises a first depth (176), a second depth (160) different from the first depth, and a third depth (162) different from both the first depth and second depth, and wherein the cavity floor comprises a plurality of substantially flat bottom surfaces separated by at least one elevational change (as shown in FIG. 2, for instance); and wherein the slider body comprises a surface that includes an inside edge (134) and an outside edge (136); an inside rail (140) is disposed on and extends from the surface proximate the inside edge and forms a first portion of the bearing surface

Art Unit: 2652

(as shown in FIG. 2, for instance); an outside rail (142) is disposed on and extends from the surface proximate the outside edge and forms a second portion of the bearing surface (as shown in FIG. 2, for instance); and the first depth, the second depth, and the third depth are situated substantially between the inside rail and the outside rail (as shown in FIG. 2, for instance).

Allowable Subject Matter

7. Claims 12, 13, and 45 are allowable over the prior art of record. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2652

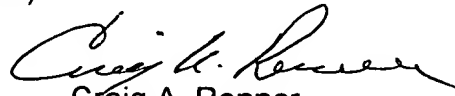
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (703) 308-0559. The examiner can normally be reached on Tuesday-Friday 7:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Craig A. Renner
Primary Examiner
Art Unit 2652

CAR